A METHOD OF ASSESSING THE RISK

OF INTRODUCING INVASIVE WEEDS

A risk assessment is conducted as part of the NEPA process to determine if an action may introduce or spread invasive weeds within a proposed project area. It is also used to prescribe follow-up treatments and project actions necessary to reduce or prevent the spread of invasive weeds where the risk of invasive weed establishment is moderate or high. The primary focus of i(risk assessment is on ground-disturbing or site altering projects conducted on National Forest System land.

Region 3 Invasive Weed Classification System. The Region 3 invasive weed classification system provides a systematic approach for assigning management emphasis priorities.

1. Class A - Those invasive weeds that are non-native (exotic) to the state and are of limited distribution or are unrecorded in the State and pose a serious threat to agricultural crop, rangelands, plants listed an endangered, threatened or sensitive, and other natural and economic resources in the ecosystem. Class A plants receive highest priority. Management emphasis is complete eradication.

2. Class B - Those invasive weeds that are non-native (exotic) species that are of limited distribution or are unrecorded in a region of the state but are common in other regions of the state. Class B plants receive second highest priority. Management emphasis is to contain the spread, decrease population ' size, and eventually eliminate the infestation when cost effective technology is available.

3. Class -C - Consists of any other invasive weeds (exotic or native) . This classification receives the lowest priority. Management emphasis is to contain spread to present population size or decrease population.

The invasive weed classes may be further subdivided to meet regional, National Forest, or local needs.

Risk Assessment Process

The invasive weed risk assessment process should be accomplished by, or closely supervised by, a person who has a good understanding of invasive weed ecology. It is an integral part of the NEPA scoping process. An overview flowchart of the Risk Assessment Process is shown in Exhibit 1 of this document.

Pre-field Review

The risk assessment process begins with a review of existing information for the subject area. Suggestions for completing this task are as follows:

1. Check local Forest Service, county/state weed board, and Natural Heritage records to determine if invasive weed species have been sighted in or adjacent to the area. Develop a list of species considered for possible occurrence.

2. Compare the habitat requirements of invasive weed species with habitat known to occur in the proposed project area to determine if potential habitat for invasive weed species exists.

3. Determine if a field reconnaissance is needed using the following:

a. If no invasive weeds are likely to occur within the area, document the results and proceed with the project as planned.

b. If the presence of invasive weed species or their habitats within or adjacent to the area is indicated by the pro-field review, conduct a field reconnaissance.

4. Summarize the results, including a list of species considered and any sources of area habitat information. File in the Risk Assesment Report and the appropriate NEPA document.

Field Reconnaissance

Use a reliable sample design in the field reconnaissance that will show that likely areas of invasive weed occurrence were searched at the proper time of year for identification of invasive weed species.

Field reconnaissance also includes inspection of potential off-site areas such as sawmills, gravel pits, equipment yards, or other areas for the presence of invasive weed species which could be transported onto NFS lands in conjunction with the proposed project.

Take the following weed management actions according to the class of invasive weed encountered:

a. Class A or B weeds are present:

(1) Develop and implement management measures to eliminate weeds.

(2) Monitor management measures for 5 years.

(3) Determine the risk of introducing invasive woods.

b. Class C weeds are present:

(1) Develop and implement management measures to prevent spread or eliminate invasive weeds.

(2) Monitor management measures for 3 years.

(3) Determine the risk of introducing invasive weeds.

c. No weeds are present or likely to occur:

(1) Document the results.

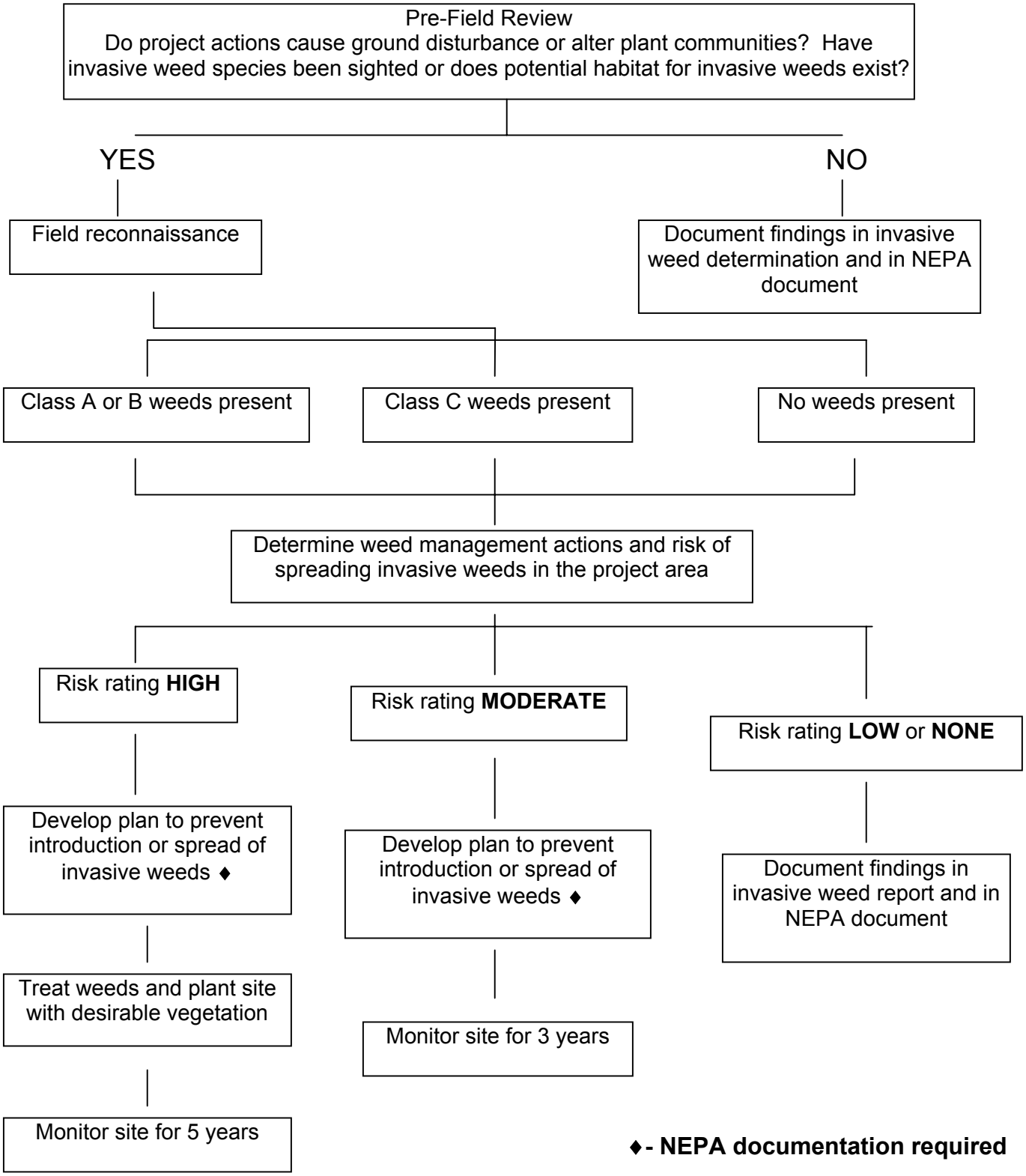
(2) Proceed with the project as planned.

File in the Risk Assessment Report and the appropriate NEPA document. Include a list of species for which a reconnaissance was conducted, a description of the survey design, and a narrative of the habitat information developed in the pre-field review. Report all sightings of invasive weed species to the appropriate interested and affected parties, including County and/or State agencies, other Federal agencies, and monitoring and oversight groups (County and/or State weed board, State Natural Heritage organization, etc.).

Using the risk assessment factors shown in Exhibit 2 of this document, determine the risk rating of introducing invasive weeds in-'the area. Document the results, including positive management actions such as planned prevention, control, and monitoring measures that may reduce or eliminate the risk of invasive weed establishment in the project area. Include a list of species considered for possible occurrence and any sources of area habitat information, along with supporting material from the pre-field review and field reconnaissance. Summarize the results and file in the Risk Assessment Report and the appropriate NEPA document.

Exhibit I

Flow Chart
Integrating Invasive Weed Evaluation with NEPA Scoping Process



♦- NEPA documentation required

Exhibit 2

Risk Rating

A Risk Rating is used to describe the relative risk of the potential for invasive weed establishment in the project area and to serve to guide further action regarding project modification or implementation. Calculate the Risk Rating as follows:

Risk Rating = Likelihood x Consequence

where: Likelihood = the likelihood that invasive weed species will become established in the project area.

Consequence = the consequence of invasive weed species becoming established in the project area.

Use the factors below in developing the Risk Rating. The factors are: Factor 1: Likelihood of Invasive Weed species spreading to project area. Factor 2: Consequence of Invasive Weed establishment in project area.

The risk or likelihood and consequences of invasive weeds range from a value of 0 (none) to 100 (high).

RISK ASSESSMENT FACTORS AND RATING

Factor I

Likelihood of Invasive Weed Species Spreading into Project Area:

NONE: (0) Invasive weed species not located within or immediately adjacent to the project area. Project activity is not likely to result in the establishment of invasive weed species in the project area.

LOW: (1) Invasive weed species present in areas adjacent but not within the project area. Project activities can be implemented and prevent the spread of invasive weeds into the project area.

MODERATE: Invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of invasive weeds within the project area.

HIGH: (10) Heavy infestations of invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of invasive weeds on disturbed sites throughout much of the project area.

Factor 2

Consequence of Invasive Weed Establishment in Project Area

NONE to LOW: (1)	None. No cumulative effects expected.
MODERATE: (5)	Possible adverse effects on site and possible expansion of infestation within project area. Cumulative effects on the economic or ecological communities (i.e. native plants) are likely, but limited.
HIGH: (10)	Obvious adverse effects within the project area and probable expansion of invasive weed infestations to areas outside the project area. Adverse cumulative effects on the economic or ecological communities (i.e. native plants) are probable.

ASSIGNING A RISK RATING

Step 1 Identify level of likelihood and consequence of adverse of effects and assign values according to the following:

None	= 0
Low	= 1
Moderate	= 5
High	=10

Step 2 Multiply level of likelihood times consequence.

Step 3 Use the value resulting in Step 2 to determine Risk Rating and Action an follows:

VALUE	RISK RATING	ACTION
0	NONE	Proceed as planned.
1-10	LOW	Proceed as planned. Initiate control treatments on invasive weed populations that are established in the area.
25	MODERATE	Develop preventative management measures for the proposed project to reduce the risk of introduction or spread of invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the are& to occupy disturbed sites with desirable species. monitor area for at least 3 consecutive years and provide for control of newly established populations of invasive weeds and follow-up treatment for previously treated infestations.
50-100	HIGH	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed sites and controlling existing infestations of invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Project must also provide for control of newly established populations of invasive weeds and follow-up treatment for previously treated infestations.